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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/081,535

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Yukiko Takeda

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MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, THANH T

ART UNIT

PAPER NUMBER

2144

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/081,535	Applicant(s) TAKEDA ET AL.	
	Examiner THANH Tammy NGUYEN	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8,20-23 and 25-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,20-23 and 25-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/13/08</u> . | 6) <input type="checkbox"/> Other: _____ |



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Detailed Office Action

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 18, 2007 has been entered.
2. Claims **1-8, 10-23, and 25-31** are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims **1-7, 20-21, 25-29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al., (hereinafter Hirose) U.S. Publication No.2001/0049825A1 in view of Shimadoi et al., (hereinafter Shimadoi) U.S.

Patent No. 6,400,729 further in view of Funaya et al., (hereinafter Funaya) U.S.

Patent No. 6,263,393 further in view of Tsuruoka., (hereinafter Tsuruoka) U.S.

Patent No. 6,101,189.

5. As to claims 1 and 25, Hirose discloses the invention substantially as claimed, Hirose discloses including an address translator for connection a network conforming to a first addressing system to a second network conforming to a second addressing system, said address translator comprising: an address translating function for translating a address conforming to the addressing system to a address conforming to the second addressing system, or vice versa [see Hirose, paragraph 0027] (*the Mac address is converted from Ma3 to Ma4 and Ma4 to Ma3*); and a detecting function for detecting communication data conforming to a particular protocol based on at least [see Hirose, paragraph, 0014] (*detecting a destination of data to be transmitted*); and wherein when said address translator creates translation information including a correspondence relationship between a in the first addressing system and address in the second addressing system for translating, [see Hirose, paragraph, 0027]. However, Hirose does not explicitly discloses address translator translates, by said address translation function, a Layer 3 address described in a Layer 3 header of the communication data; address translation function,
6. In the same field of endeavor, Shimadoi et al discloses (e.g., Protocol conversion system for data communication between different type of open Network). Shimadoi discloses address translator translates, by said address translation

- function, a Layer 3 address described in a Layer 3 header of the communication data; address translation function [see col. 5, line 25 to col. 6, line 6]. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Shimadoi's teachings of Protocol conversion system for data communication between different type of open Network with the teachings of Hirose to have address translator translates, by said address translation function, a Layer 3 address described in a Layer 3 header of the communication data; address translation function, for the purpose of raising reliability in the transmission and reception of data [see col. 1, lines 54-55]. However, Hirose does not explicitly disclose header of the communication data.
7. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses header of the communication data [see Funaya, col. 11, lines 45-50, and col. 12, lines 59-61] (the transaction cell is composed of a header).
 8. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have determining header of the communication data, for the purpose of decreasing the bandwidth of the line between the bus bridge and the switch module [see Funaya, col. 2, lines 63-65]. Also, Hirose and others do not explicitly disclose Layer 3 address translating.

9. In the same field of endeavor, Tsuruoka et al discloses (e.g., Gateway apparatus and packet routing method). Tsuruoka discloses Layer 3 address translating [see col.6, lines 27-43, and col. 12, lines 53-67].
10. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Tsuruoka's teachings of Gateway apparatus and packet routing method with the teachings of Hirose, for the purpose of providing dynamically assigns a layer 3 address to an accessing terminal [see col.1, lines 37-40].
11. As to claims 2 and 26-27, Hirose does not explicitly discloses the invention as claimed, further comprising communicating means for communicating with a server device, wherein said address translator sends said translation information and the region higher than Layer 3 of the communication data to said server device, and receives information including said Layer 3 address described in the region higher than Layer 3 which has been translate by said server device.
12. In the same field of endeavor, Shimadoi et al discloses (e.g., Protocol conversion system for data communication between different type of open Network). Shimadoi discloses an address of the communication data to a higher Layer address corresponding to a Layer higher than Layer 3 [see col. 5, line25 to col. 6, line 6]. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Shimadoi's teachings of Protocol conversion system for data communication between different type of open Network with the teachings of Hirose to have address translation function, an address of the communication data to a Layer

- higher than Layer 3, for the purpose of raising reliability in the transmission and reception of data [see col. 1, lines 54-55].
13. As to claims 3, and 28, Hirose does not explicitly disclose the invention as claimed, wherein further comprising a processing part for translating said Layer 3 address described in the region higher than Layer 3 of the communication data.
14. In the same field of endeavor, Shimadoi et al discloses (e.g., Protocol conversion system for data communication between different type of open Network). Shimadoi for translating said Layer 3 address of the communication data [see col. 5, line 25 to col. 6, line 6].
15. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Shimadoi's teachings of Protocol conversion system for data communication between different type of open Network with the teachings of Hirose to have translating said Layer 3 address of the communication data, for the purpose of raising reliability in the transmission and reception of data [see col. 1, lines 54-55].
16. As to claim 4, Hirose discloses the invention substantially as claimed, Hirose discloses, including a message processing method comprising: first translation processing for translating a Layer 3 address of the message from information conforming to a first addressing system to information conforming to a second address system [see Hirose, paragraph 0027] (*the Mac address is converted from Ma3 to Ma4*); detection processing for detecting message conforming to a particular protocol based on at least information on a port number contained in a

- header of the message; and wherein the address translator detects a message conforming to the particular protocol, creating translation information for translating a Layer 3 address described in a region higher than layer 3 of the message. However, Hirose does not explicitly disclose address translator translates, by said address translation function, a Layer 3 address described in a Layer 3 header of the communication data; address translation function,
17. In the same field of endeavor, Shimadoi et al discloses (e.g., Protocol conversion system for data communication between different type of open Network). Shimadoi discloses address translator translates, by said address translation function, a Layer 3 address described in a Layer 3 header of the communication data; address translation function [see col. 5, line 25 to col. 6, line 6]. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Shimadoi's teachings of Protocol conversion system for data communication between different type of open Network with the teachings of Hirose to have address translator translates, by said address translation function, a Layer 3 address described in a Layer 3 header of the communication data; address translation function, for the purpose of raising reliability in the transmission and reception of data [see col. 1, lines 54-55].
18. However, Hirose does not explicitly disclose an information in port contained in a header of the message and the first part from information, information in the second portion.

19. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses header of communication data an information in port contained in a header of the message and the first part from information, information in the second portion [see Funaya, col.11, lines 45-63, and col.12, lines 59-61](the transaction cell is composed of a header) and (see Funaya multiple portions of data in fig.23).
20. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have an information in port contained in a header of the message and the first part from information, information in the second portion for the purpose of decreasing the bandwidth of the line between the bus bridge and the switch module [see Funaya, col.2, lines 63-65).
21. As to claim 5, Hirose, teaches the invention as claimed, further comprising: using a first server and second server [see Hirose, paragraph 0030] (server device); performing said first translation processing in said first server; transferring the translation information from and the region higher than layer 3 of the message from said first server to said second server; said second server extracting a translation; extracting, by said second server, a parameter which requires translation from said region higher than Layer 3 of the message; performing said second translation processing described in the region higher than Layer 3 of the message on said extracted parameter in said second server; and transferring the information which has undergone said second translation processing from said

- second server to said first server (see Hirose, paragraph, 0027] (*the IP address is converted from the global IP address to the private IP address*). However, Hirose does not explicitly disclose a second portion of the communication data and parameter.
22. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses a second portion of the communication data and parameter (see Funaya multiple portions of data in fig.23).
23. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have a second portion of the communication data and parameter for the purpose of decreasing the bandwidth of the line between the bus bridge and the switch module [see Funaya, col.2, lines 63-65). Also, Hirose and others do not explicitly disclose Layer 3 address translating.
24. In the same field of endeavor, Tsuruoka et al discloses (e.g., Gateway apparatus and packet routing method). Tsuruoka discloses Layer 3 address translating [see col.6, lines 27-43, and col. 12, lines 53-67].
25. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Tsuruoka's teachings of Gateway apparatus and packet routing method with the teachings of Hirose, for the purpose of providing dynamically assigns a layer 3 address to an accessing terminal [see col.1, lines 37-40].

26. As to claim 6, Hirose teaches the invention as claimed, wherein said second server [see Hirose, paragraph 0030] (server device) has a table indicative of parameters which is required a translation, and extracts a parameter which requires a translation [see Hirose, paragraph 0027] (*the Mac address is converted from Ma3 to Ma4*). However, Hirose does not explicitly disclose a second portion.
27. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses a second portion of the communication data (see Funaya multiple portions of data in fig.23).
28. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have second portion of the communication data for the purpose of decreasing the bandwidth of the line between the bus bridge and the switch module [see Funaya, col.2, lines 63-65).
29. As to claims 7, and 29 Hirose teaches the invention as claimed, said first server transfer the parameter which requires a translation together with a tag added thereto, said second portion to said second server, said second server [see Hirose, paragraph, 0030] extracts a parameter which requires a translation from said second portion based on said tag [see Funaya, fig. 1].
30. Claims **8, 22-23, and 30-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al., (hereinafter Hirose) U.S. Publication

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No.2001/0049825A1 in view of Funaya et al., (hereinafter Funaya) U.S. Patent No. 6,263,393 further in view of Tsao et al, (hereinafter Tsao) U.S. Patent No. 6,862,274.

31. As to claims 8, and 31 Hirose discloses the invention substantially as claimed, information for translator is an address [see Hirose, fig.1]. However, Hirose does not explicitly first portion is an IP header, said second portion is a payload including an SIP message.
32. In the same field of endeavor, Funaya discloses (e.g., Bus switch for realizing bus transactions across two or more buses). Funaya discloses first portion is an IP header, said second portion is a payload including an SIP message [see Funaya, col.11, lines 45-50, and col.12, lines 59-61](the transaction cell is composed of a header).
33. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Funaya's teachings of a Bus switch for realizing bus transactions across two or more buses with the teachings of Hirose to have determining header of communication d first portion is an IP header, said second portion is a payload including an SIP message for the purpose of decreasing the bandwidth of the line between the bus bridge and the switch module [see Funaya, col.2, lines 63-65). Also, Hirose and Funaya do not explicitly disclose one of first protocol and second protocol is IPV4, the other is IPV6.

34. In the same field of endeavor, Tsao discloses (e.g., Method and system capable of providing mobility support for IPv4/IPv6 inter-networking). Tsao discloses one of first protocol and second protocol is IPV4, the other is IPV6 [see Tsao, col.4, lines 3-37](IPv4/IPv6).
35. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Tsao's teachings of a Method and system capable of providing mobility support for IPv4/IPv6 inter-networking with the teachings of Hirose to have one of first protocol and second protocol is IPV4, the other is IPV6 for the purpose of improvement of making the roaming in the networks with different network protocol [see Tsao col.1, lines 22-24].
36. As to claim 22, 23 and 30, Hirose does not explicitly disclose in case of that the addressing system first is IPv4, the second addressing system is IPv6, and wherein in case of that the first addressing system is IPv6 and the second addressing system is IPv4.
37. In the same field of endeavor, Tsao discloses (e.g., Method and system capable of providing mobility support for IPv4/IPv6 inter-networking). Tsao discloses in case of that the first addressing system is IPv4, the second addressing system is IPv6, and wherein in case of that the first addressing system is IPv6 and the second addressing system is IPv4 [see Tsao, col.4, lines 3-37](IPv4/IPv6).
38. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Tsao's teachings of a Method and system capable of providing mobility support for

IPv4/IPv6 inter-networking with the teachings of Hirose to have in case of that the first addressing system is IPv4, the second addressing system is IPv6, and wherein in case of that the first addressing system is IPv6 and the second addressing system is IPv4 for the purpose of improvement of making the roaming in the networks with different network protocol [see Tsao col.1, lines 22-24].

Conclusion

39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy T. Nguyen whose telephone number is 571-272-3929. The examiner can normally be reached on Monday - Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **William Vaughn** can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THANH Tammy NGUYEN/

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Primary Examiner, Art Unit 2144

March 17, 2008